

Amendments to the Claims

This listing of claims replaces all previous versions and listings of the claims.

Listing of Claims:

1.-13. (Canceled)

14. (Currently Amended) An article comprising recrystallized silicon carbide having a pore size of at least about 15 μm with a pore surface area of less than about 0.04 m^2/g , and comprising impurities of iron, copper, nickel, chromium, and calcium at a total concentration of less about 400 ppm.

15. (Canceled)

16.-22. (Canceled)

23. (Previously Presented) The article of claim 14, wherein the recrystallized silicon carbide further comprises inert impurities.

24. (Previously Presented) The article of claim 14, wherein the article is a wafer boat.

25.-29. (Canceled)

30. (Previously Presented) A wafer boat comprising recrystallized silicon carbide having pores interconnected to form a network and comprising an active impurity component at a concentration of less than 1 ppm, wherein the active impurity component is one of iron, copper, nickel, chromium, and calcium.

31. (Canceled)

32. (Currently Amended) The ~~article~~wafer boat of claim 30 wherein the pores have a pore size of at least about 15 μm .

33. (Currently Amended) An article comprising a recrystallized silicon carbide member having an interconnected network of pores that have a pore size of at least about 5 μm and comprising ~~impurities at a concentration of less than about 400 ppma nickel concentration at or below 5 ppm.~~

34. (Previously Presented) The article of claim 33, wherein the silicon carbide member is free of free silicon.

35. (Previously Presented) The article of claim 33, wherein the silicon carbide member has a Fe concentration at or below 2 ppm.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (New) The wafer boat of claim 30, comprising:
a base plate;
a top plate;

a plurality of support rods disposed about a perimeter of the base plate and extending between the base plate and the top plate, each support rod of the plurality of support rods having a first distal end that is attached to the base plate and a second distal end that is attached to the top plate, each support rod including a plurality of slots formed therein that define a plurality of teeth; and

a plurality of wafer supports adapted to be received in a corresponding slot of each of the plurality of support rods, each of the plurality of wafer supports having a continuous open shape and including a pair of leg sections that form an interference fit with at least two of the plurality of support rods.

43. (New) The wafer boat of claim 42, wherein the base plate, the top plate, the plurality of support rods, and the plurality of wafer supports are formed from recrystallized silicon carbide having a pore size of at least 15 μm .

44. (New) The wafer boat of claim 42, wherein the plurality of support rods includes first, second, and third support rods, the first and second support rods being disposed approximately one hundred and eighty degrees apart from one another about the perimeter of the base plate, and the third support rod being disposed on the perimeter of the base plate approximately ninety degrees apart from the first and second support rods.

45. (New) The wafer boat of claim 44, wherein the top plate has a generally circular shape having a central hole formed therein, the top plate including an expansion slot that extends radially outward from the central hole in the top plate and through an outer periphery of the top plate.

46. (New) The wafer boat of claim 45, wherein each of the plurality of wafer supports includes a continuous flat member having an open shape, the continuous flat member including a plurality of inter-connected arcuately curved sections, two of the arcuately curved sections defining an arc of approximately ninety degrees and adapted to support a wafer at approximately a $0.7R$ boundary region of the wafer where R is a radius of the wafer, each of

the two arcuately curved sections being connected to a respective leg section of the pair of leg sections and terminating in a free distal end;

wherein each of the free distal ends is shaped to form the interference fit with a slot of a respective one of the at least two support rods.

47. (New) The wafer boat of claim 46, wherein the top plate has a C-shape, and wherein an open end of the C-shape is aligned with the expansion slot in the base plate.

48. (New) The wafer boat of claim 46, wherein the free distal ends of each continuous flat member are mitered to engage with the slot of a respective one of the at least two support rods along a line of contact.

49. (New) The wafer boat of claim 42, wherein the plurality of support rods includes first, second, third, and fourth support rods, the first and second support rods being disposed approximately one hundred and eighty degrees apart from one another about the perimeter of the base plate, and the third and fourth support rods being disposed on the perimeter of the base plate at positions that are approximately equidistant from a position on the perimeter of the base plate that is spaced approximately ninety degrees apart from the first and second support rods.

50. (New) The wafer boat of claim 42, wherein the plurality of wafer supports can be at least one of inserted in and removed from the plurality of slots formed in the plurality of supports rods, and wherein the pair of leg sections of each of the plurality of wafer supports removably forms an interference fit with a respective one of the at least two of the plurality of support rods.

51. (New) A wafer boat body adapted to receive a plurality of wafer supports, comprising:

a base plate;

a top plate;

a plurality of support rods disposed about a perimeter of the base plate and extending between the base plate and the top plate, each support rod of the plurality of support rods having a first distal end that is attached to the base plate and a second distal end that is attached to the top plate, each support rod including a plurality of slots formed therein that define a plurality of teeth;

wherein a top surface of each of the plurality of teeth of each of the plurality of support rods is adapted to support a respective wafer support of the plurality of wafer supports; and

wherein corresponding slots in at least two of the plurality supports rods form an interference fit with portions of the respective wafer support.

52. (New) The wafer boat body of claim 51, wherein the plurality of support rods includes first, second, third, and fourth support rods, the first and second support rods being disposed approximately one hundred and eighty degrees apart from one another about the perimeter of the base plate, and the third and fourth support rods being disposed on the perimeter of the base plate at positions that are approximately equidistant from a position on the perimeter of the base plate that is spaced approximately ninety degrees apart from the first and second support rods.

53. (New) The wafer boat body of claim 51, wherein the plurality of slots in the at least two of the plurality of support rods are adapted to engage with the portions of the respective wafer support along a line of contact.

54. (New) A wafer support to support a wafer having a predetermined radius R for use in a wafer boat body having a plurality of vertical support rods, each of the plurality of vertical support rods including a plurality of slots formed therein that define a plurality of teeth, the wafer support comprising:

a continuous flat member having an open shape and including a plurality of interconnected arcuately curved sections, two of the arcuately curved sections defining an arc of approximately ninety degrees and adapted to support the wafer at approximately a $0.7R$

boundary region of the wafer, each of the two arcuately curved sections being connected to a respective leg section that terminates in a free distal end;

wherein each of the free distal ends of the continuous flat member is shaped to form an interference fit with a slot of a respective one of the plurality of vertical support rods.

55. (New) The wafer support of claim 54, wherein the continuous flat member is formed from recrystallized silicon carbide having a pore size of approximately 15 μ m.

56. (New) The wafer support of claim 55, wherein the plurality of interconnected arcuately curved sections include first, second, and third arcuately curved sections, the first and second arcuately curved sections defining the arc of approximately ninety degrees and adapted to support the wafer at approximately the 0.7R boundary region of the wafer, the first and second arcuately curved sections being respectively connected to third arcuately curved section by first and second straight sections.

57. (New) The wafer support of claim 56, wherein the third arcuately curved section defines an arc of approximately sixty degrees.

58. (New) The wafer support of claim 57, wherein each of the free distal ends of the continuous flat member forms a removable interference fit with the slot of the respective one of the plurality of support rods.